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# Recursive functions with implicit termination: a new approach illustrated by software-engineering examples

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 This paper appears in: [System Sciences, 1990., Proceedings of the Twenty-Third Annual Hawaii International Conference on](#)

Publication Date: 2-5 Jan 1990

Volume: ii, On page(s): 318-327 vol.2

Meeting Date: 01/02/1990 - 01/05/1990

Location: Kailua-Kona, HI, USA

References Cited: 53

INSPEC Accession Number: 3685824

Digital Object Identifier: 10.1109/HICSS.1990.205203

Current Version Published: 2002-08-06

**Abstract**

The author describes how the extended non-first-normal-form (ENFNF) data model in combination with a recursion mechanism based on functions with implicit termination is a promising vehicle for the database part of software engineering systems. Functions have been used primarily as a tool for implementing recursive queries. It is shown how dependencies between software objects can be modeled by objects of the ENFNF data model in a convenient and natural way. Moreover, arbitrary dependencies can be queried by functionally recursive queries in a natural way. Nevertheless, the method is not limited to software engineering systems. Implementation techniques are presented

**Index Terms**
**Inspec**
**Controlled Indexing**
[relational databases](#) [software engineering](#)
**Non-controlled Indexing**
[arbitrary dependencies](#) [database](#) [dependencies](#) [extended nonfirst normal form data model](#)  
[implicit termination](#) [recursive functions](#) [recursive queries](#) [software objects](#) [software-engineering](#)
**Author Keywords**

Not Available

**Medical Subject Heading (MeSH Terms)**

Not Available

**References**

No references available on IEEE Xplore.

**Citing Documents**

No citing documents available on IEEEExplore.